your partner in food safety

SDS
Safety Data Sheet

1) Product Identification

Product Name: Liquid Smokehouse Clnr.

Product Code: I00214

Recommended Use: High Alkaline Cleaner

Producer: Birko Corporation
9152 Yosemite Street
Henderson, CO 80640-8027

Contact Information: (303) 289-1090 or 1-800-525-0476

Emergency Number: CHEMTREC 1-800-424-9300

2) Hazard(s) Identification

Health	Environmental	Physical
Acute Toxicity Cat. 4 (oral) Skin Corrosion Cat. 1A Eye Effects Cat. 1	Aquatic Toxicity Acute Cat. 3	Corrosive Cat. 1

Labeling:

Symbol:

Signal Word: Danger

Hazard Statement(s): Causes irreversible eye damage. Harmful or fatal if swallowed. Causes burns. Do not get into eyes, on skin, or on clothing. Corrosive to certain types of metals.

Precautionary Statement(s): Use rubber gloves, protective splash-proof goggles, and protective clothing. Remove contaminated clothing and wash before re-use. Do not contaminate food, feed, or water. Keep container closed when not in use.

3) Composition/ Information on Ingredients

Name(s)	Synonym(s)	CAS Number	Weight %
Sodium Hydroxide	Caustic Soda	01310-73-2	< 40%
Potassium Hydroxide	Liquid Potash	01310-58-3	< 10%

4) First-Aid Measures

Inhalation	Skin Contact	Eye Contact	Ingestion
Remove from exposure. Administer oxygen if breathing is difficult. Resuscitate if necessary. Get medical help immediately	Immediately drench with flowing water for at least 15 minutes. Remove contaminated clothing as quickly as possible. Launder before reuse. Destroy contaminated shoes. Medical treatment for all burns must begin immediately, no matter how minor they seem.	Immediately rinse eyes thoroughly in cool running water for at least 15 minutes. Get medical attention at once, preferably from an ophthalmologist.	DO NOT induce vomiting. Have a conscious victim drink fruit juice or water to dilute. Never give an unconscious person anything by mouth. Get medical help immediately.

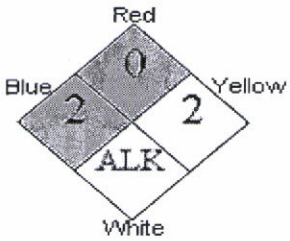
5) Firefighting Measures

Suitable Extinguishing Media: Water, Carbon Dioxide, Dry Chemical, and Foam Blanket

Unsuitable Extinguishing Media: N/A

Specific Hazards: Always wear self-contained breathing apparatus when fighting a chemical fire.

Special Protective Actions for Fire-Fighters: Carbon Monoxide/ Carbon Dioxide gases liberated during combustion.



6) Accidental Release Measures

Personal Precautions: Be sure to use all necessary Personal Protective Equipment

Environmental Precautions: Avoid contamination of food, feed, waterway, or groundwater.

Methods and Materials for Containment and Clean-Up: Capture material and contain for re-use or disposal. Remainder may be neutralized with a mild acid (vinegar) and rinsed to a sewer.

7) Handling and Storage

Precautions for Safe Handling: Do not contaminate food, feed, or natural water. RELEASES HEAT WHEN MIXED WITH WATER. Supplier is not responsible for disposition of this product. Do not reuse container. Maintain an eyewash station, and safety shower in product handling areas.

Conditions for Safe Storage: Keep container closed when not in use. Store in a cool, dry location.

8) Exposure Controls and Personal Protection

Appropriate Engineering Controls: Ventilation: Provide local exhaust ventilation where dust or mist may be generated. Ensure compliance with applicable exposure limits.

Exposure Limits:

Name (CAS-No.)	PEL	TWA	Ceiling	IDLH
Sodium Hydroxide (01310-73-2)	2 mg/m3	ACGIH 2mg/m3 OSHA 2mg/m3	ACGIH 2mg/m3 OSHA 2mg/m3	10 mg/m3
Potassium Hydroxide (01310-58-3)	NONE	ACGIH 2mg/m3	ACGIH 2mg/m3	NONE

Personal Protective Equipment

Eye/Face	Skin	Gloves	Boots

Eye/Face: Safety glasses with Side shields. Wear chemical safety goggles with face shield when appropriate.

Skin: Wear chemical resistant clothing and rubber boots.

Gloves: Wear appropriate chemical resistant gloves.

Respiratory: Use only when concentrations exceed exposure limits. If limits are exceeded a NIOSH approved respirator is required. If eye irritation occurs use a full face style mask. When vapor concentrations are above 10 ppm or in a spill emergency a NIOSH approved self-contained breathing apparatus or airline respirator, with full-face piece is required. If respirators are warranted in the workplace a respiratory protection programs must meet 29 CFR 1910.134, and be followed.

Protective Material Types: Butyl rubber, natural rubber, neoprene, nitrile, polyvinyl chloride (PVC), or Tychem (R)

9) Physical and Chemical Properties

Physical Form: Liquid

Appearance: Dark Brown

Odor: Smoky odor

pH: (1% Solution) 12.8

Melting Point: Not available

Freezing Point: Not Determined

Boiling Point: 212-220° F

Flash Point: Not available

Evaporation Rate: < 1

Flammability: Not flammable

Upper/Lower Flammability or explosive limits: Not available

Vapor Pressure: Not Established

Vapor Density: > 1

Relative Density: Not available

Specific Gravity: 1.4

Solubility: 100%

Partition coefficient: Not available

Auto-Ignition Temperature: Not available

Decomposition Temperature: Not available

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10) Stability and Reactivity

Chemical Stability: Stable at normal temperatures and pressure.

Possibility of Hazardous Reactions: This product does not polymerize under normal storage and use conditions.

Conditions to Avoid: Mixing acids and other incompatible materials may cause splattering and release of large amounts of heat. Will react with some metals forming flammable hydrogen gas. Carbon monoxide gas may form upon contact with reducing sugars or food and beverage products in enclosed spaces.

Materials to Avoid: Acids, halogenated compounds, prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys.

Hazardous Decomposition Products: Carbon Monoxide/Carbon Dioxide gases liberated during combustion.

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11) Toxicological Information

Acute Toxicity:

Test	Results	Basis
Oral LD50 (Rabbits)	500 mg/kg	Testing of similar material
Dermal LD50 (Rabbits)	1350 mg/kg	Testing of similar material

Summary Comments: The severity of the tissue damage is a function of its concentration, the length of tissue contact time, and local tissue conditions. After exposure there may be a time delay before irritation and other effects occur. This material is a strong irritant and is corrosive to the skin, eyes, and mucous membranes. This material may cause severe burns and permanent damage to any tissue with which it comes into contact. Inhalation will cause severe irritation, possible burns with pulmonary edema, which may lead to pneumonitis. Skin contact with this material may cause severe irritation and corrosion of tissue. Eye contact can cause severe irritation, corrosion with possible corneal damage and blindness. Ingestion may cause irritation, corrosion/ulceration, nausea, and vomiting.

Sub-chronic/Chronic Toxicity:

Test	Results	Comments
N/A	N/A	N/A

Summary Comments: In general, chronic effects are due to long-term irritation. This material may cause dermatitis on the skin, or recurrent corneal ulceration and visual disturbances. In rare cases reports have noted long-term inhalation causes bronchial inflammatory reaction or obstructive airway dysfunction.

Medical conditions aggravated by exposure: Respiratory system (including asthma and other breathing disorders)

12) Ecological Information

Toxicity:

Test	Results
Daphnia LC50	100 ppm
Brook trout LC50	24 hours 25 ppm
King salmon LC50	48 ppm
Shrimp LC50	48 hours 33-100 ppm
Cockle LC50	48 hours 330-1000 ppm

Persistence and Degradability: This material is alkaline and may raise the pH of surface waters with low buffering capacity. This material is believed to exist in the disassociated state in the environment. This material is inorganic and not subject to biodegradation.

Bioaccumulative Potential: This material is believed not to bioaccumulate.

Mobility in Soil: Not available

Other Adverse Effects: This material has exhibited slight toxicity to terrestrial organisms.

13) Disposal Considerations

Disposal Method: Re-use or reprocess if possible. Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D002

14) Transport Information

UN Number: UN3266

UN Proper Shipping Name: Corrosive liquids, Basic, Inorganic, n.o.s. (Potassium Hydroxide, Sodium Hydroxide)

Transport Hazard Class (es): 8

Packing Group: II

Environmental Hazard(s): N/A

Special Precautions for User: N/A

15) Regulatory Information

US Regulations:

CERCLA Sections 102a/103 Hazardous substances (40 CFR 302.4): Sodium Hydroxide: 1000 lbs. RQ on active basis

Potassium Hydroxide: 1000 lbs. RQ on active basis

SARA Title III SARA Sections 311/312 Hazardous Categories (40 CFR 370.21):

Acute: Yes

Chronic: No

Fire: No

Reactive: No

Sudden Release: No

State Regulations:

California Proposition 65: This product is not listed, but it may contain contaminants known to the State of California to cause cancer or reproductive toxicity as listed under Propositions 65 State Drinking Water and Toxic Enforcement Act.

New Jersey Worker and Community Right to Know: Reporting Requirements:

Water	7732-18-5	48.5-94.5%
Sodium Hydroxide	1310-73-2	5.5-51.5%
Sodium Chloride	7647-14-5	0-5.0%
Water	7732-18-5	49-90%
Potassium Hydroxide	1310-58-3	10-51%

Right to Know Hazardous Substance List:

Sodium Hydroxide	1310-73-2	5.5-51.5%
Potassium Hydroxide	1310-58-3	10-51%

Special Health Hazard Substance List:

Sodium Hydroxide	1310-73-2	5.5-51.5%
Potassium Hydroxide	1310-58-3	10-51%

Pennsylvania Right to Know: Reporting Requirements:

Water	7732-18-5	48.5-94.5%
Sodium Hydroxide	1310-73-2	5.5-51.5%
Sodium Chloride	7647-14-5	0-5.0%
Water	7732-18-5	49-90%
Potassium Hydroxide	1310-58-3	10-51%

Hazardous Substance List:

Sodium Hydroxide	1310-73-2	5.5-51.5%
Potassium Hydroxide	1310-58-3	10-51%

Environmental Hazardous Substance List:

Sodium Hydroxide	1310-73-2	5.5-51.5%
Potassium Hydroxide	1310-58-3	10-51%

Special Hazardous Substance List:

Not regulated

Canadian Regulations:

Controlled Products Regulations (CPR): This product has been classified in accordance with the criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the CPR.

WHMIS Classification: E

National Inventory Status: U.S. Inventory (TSCA): All the components of this substance are listed on or exempt from the inventory.

TSCA 12(b) Export Notification: Not Listed

Canada Inventory (DSL/NDSL): All components of this product are listed on the DSL

16) Other Information

HMIS

0	FLAMMABILITY
2	HEALTH
2	REACTIVITY
J	Personal Protection

Hazard Index

4-Severe

3-Serious

2-Moderate

1-Slight

0-Minimal

Preparer: Ramsey Johnson

Approved By: Terry L. McAninch

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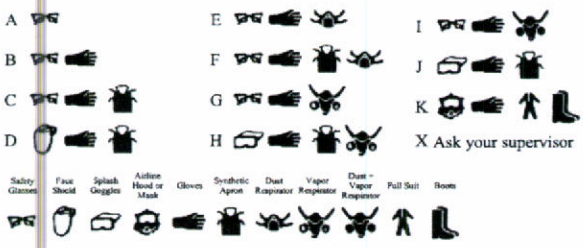
Personal Protective Index